ABSTRACT OF THE DISCLOSURE

L-glutamine is produced by culturing a coryneform bacterium having L-glutamine-producing ability and modified so that intracellular glutaminase activity is reduced, and preferably also modified so that intracellular glutamine synthetase activity is enhanced. The method of production includes culturing the bacterium in a medium, followed by accumulation of L-glutamine in the medium and collecting the L-glutamine from the medium.